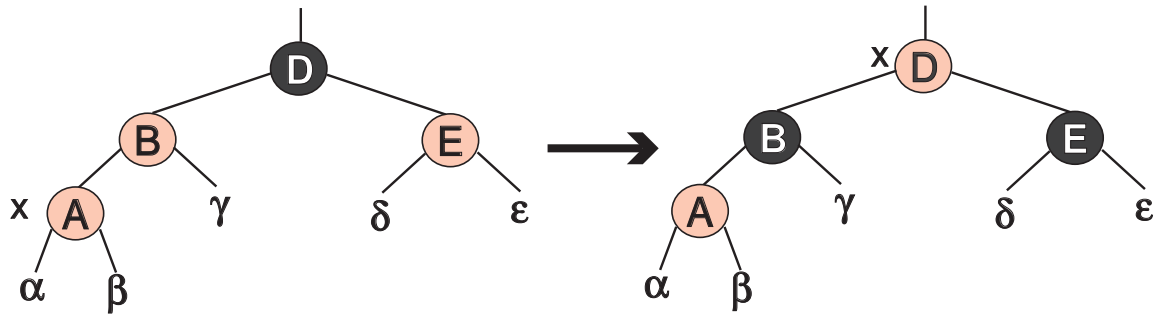


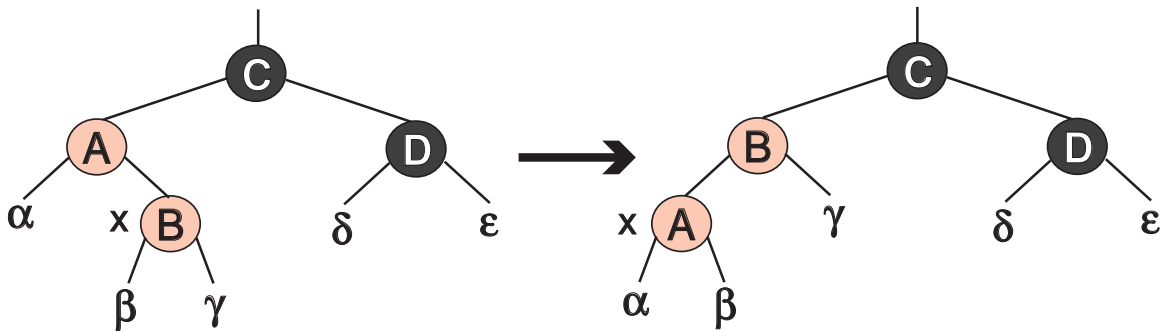
This sheet of paper may be used as a “cheat sheet” for the exam. However, the sheet must not contain any of your writing on it. If you wish to take notes directly on this sheet you may obtain a “clean” copy of these diagrams from the course web site.

Red-Black Tree Insert: Case 1

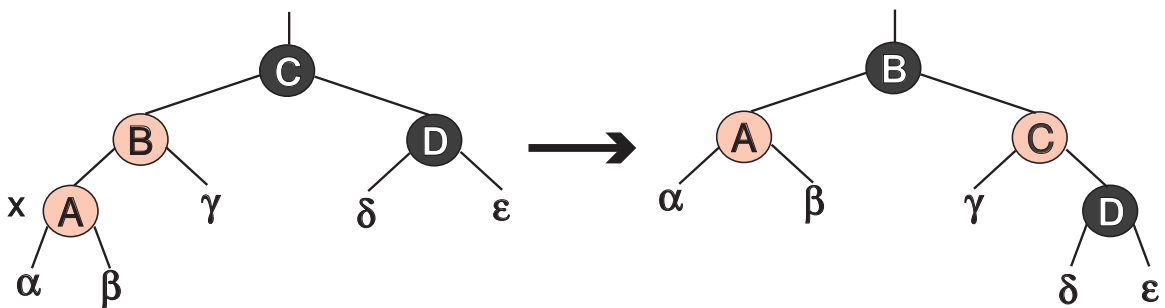


Note: The same rule applies if x were at γ

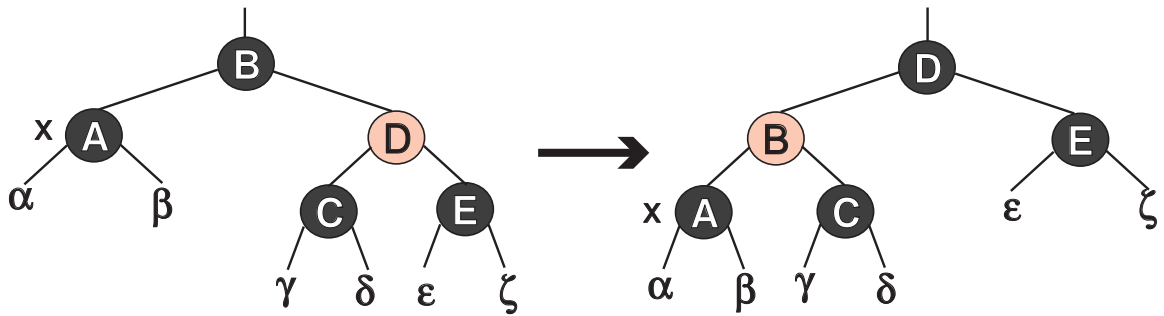
Red-Black Tree Insert: Case 2



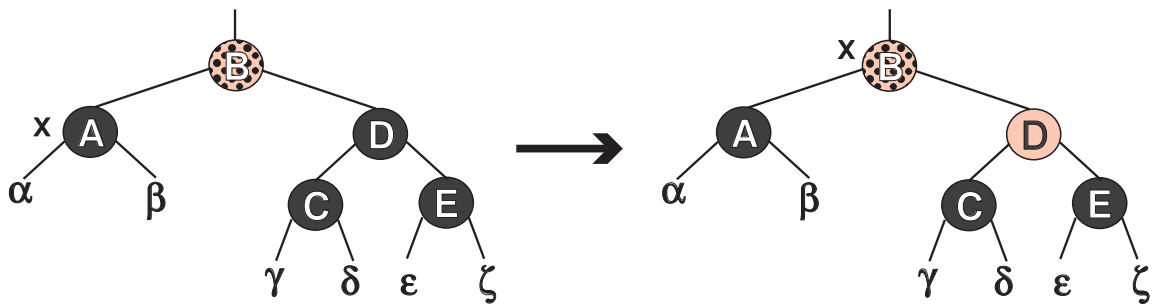
Red-Black Tree Insert: Case 3



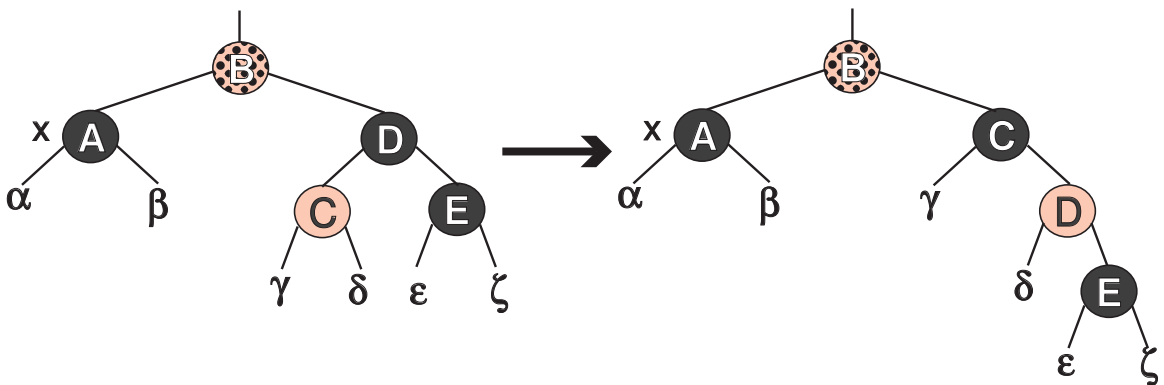
Red-Black Tree Delete: Case 1



Red-Black Tree Delete: Case 2



Red-Black Tree Delete: Case 3



Red-Black Tree Delete: Case 4

